

Plans and Ideas in Sweden for Involvement in ILWS

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Recent Developments

Aspera-4 on Venus Express

Hardware similar to Aspera-3 (Mars Express)

Measures: electrons, ions, energetic neutral atoms

PI: S Barabash (Swedish Institute of Space Physics)

Swedish Solar Telescope on La Palma

Aperture: 1 meter Resolution: 90 km

Operated by: Royal Swedish <Academy of Sciences





Recent Developments - cont.

Space Weather

The Swedish Institute of Space Physics in Lund has become a Regional Warning Center of the International Space Environment Service (leader: H Lundstedt)

The Institute is also contracted by ESA for the GIC Pilot Project "Real-time forecast service for geomagnetically induced currents"





Proposed Future Projects

Call for Ideas

Issued in the Autumn of 2001 35 responses were received

Scientific priority

STEAM, a microwave satellite for atmospheric research





Near-term plan: TechnoSat

Phase A funded, to start in Spring of 2003

Intended for launch within 2-3 years

Many different technology tests for TechnoSat have been proposed. Of special relevance to ILWS:

- Ecaps wire boom systems (Alfvén Lab.) ?
- Plasma instrument package?





Other proposals relevant to ILWS

Auroral Quartet

4 satellites, well-studied, requires international cooperation

Atmosphere-Ionosphere Mission (A-IM)

New project, very low orbit?, ambitious

SAGA

Plasma instruments for planetary research, in particular Venus

Instruments for other space missions

Contributions to Bepi Colombo (ESA), Solar Orbiter (ESA), McPearl (Canada), MMS (NASA)





Sounding Rocket Programme

Swedish Sounding Rocket Programme for Aeronomy

A programme of sounding rockets for atmospheric research is currently under consideration. A decision on funding is expected in the Spring of 2003.

